Title: Providing supportive networks to reduce perinatal transmission of HIV

Health department/organization: Delaware Department of Public Health

Authors: Sharon A. Letts (email: sharon.letts@state.de.us); James E. Dickinson

(email: james.dickinson@state.de.us)

Goal: Linkage to and maintenance of care for HIV-infected women

Program type: Provider training; case management

Collaborators: Other HIV/AIDS program staff; HIV/AIDS surveillance

## **Background/Objectives**

The primary goal for any HIV prevention program is to reduce the transmission of HIV. Essential to reducing perinatal transmission is first identifying pregnant women who are HIV positive, getting them into appropriate treatment and maintaining that treatment through pre and postnatal care.

Delaware has a comprehensive system for identifying and providing treatment to pregnant women who are HIV positive. Through working with other state and community agencies, a collaborative system has been developed to ensure that pregnant women have access to testing and treatment.

Delaware law mandates that all pregnant women be offered HIV testing regardless of whether they are in public or private care. After this law was enacted, the Delaware Department of Public Health (DPH) supported widespread education for all OB/GYN providers in public and private sectors. Emphasis was placed on making HIV testing routine for all pregnant women and ensuring that all hospitals customarily test women who are admitted to labor and delivery and who do not have documented HIV tests in their charts.

## **Methods**

Delaware has one provider for HIV/AIDS treatment outside of private care, Christiana Health Care Systems (CCHS). CCHS is also the sole provider for Delaware's High Risk Pregnancy Clinic (HRPC). Over 80% of HIVpositive pregnant women are in clinic care. There are 2 ways that HIV-positive women would come to HRPC care: 1) they were receiving HIV/AIDS treatment when they became pregnant or 2) during routine testing at their OB/ GYN they were discovered to be HIV positive and referred to the HRPC. It is routine for all HIV-positive pregnant women to be referred to HRPC and to be enrolled in the HIV program's Ryan White Title IV program. Pregnant women who are in care with HRPC routinely receive highly active antiretroviral therapy (HAART) to prevent perinatal transmission. The clinic and private care providers work in conjunction to ensure that pregnant women receive up-to-date, state-of-the-art care.

DPH and the HIV/AIDS treatment clinic work collaboratively to identify women who are HIV positive, enroll them in clinic care, and maintain that care. DPH ensures that all state and CBO testing sites refer persons who are HIV positive to clinic care. It is standard practice for state

testing sites and CBOs to follow up on referral to treatment to ensure that the client contacted the clinic. The appointment for clinic care is made at the point of delivery of result by the HIV counselor or other provider whenever possible.

Once a woman has entered care for HIV/AIDS and her pregnancy, she is encouraged to remain in care. Both the clinics and DPH cooperate to help clients adhere to treatment protocols. HIV/ AIDS Treatment/HRP clinics will contact DPH if a client has missed appointments and cannot be contacted. DPH will arrange for a disease intervention specialist (DIS) to locate the client and encourage him or her back into care. DIS workers will mediate between the client and clinic(s) to facilitate continued treatment. Currently, 1 CBO is contracted to find persons lost to care or who experience difficulties keeping appointments and assist them in appropriately accessing the clinic services. This has proven to be very successful in returning clients to care. A recent example of how this works:

Last month, a pregnant HIV-positive client missed an appointment at the Wellness Center for HIV treatment and refused to reschedule the appointment. The situation was immediately reported to DPH central office. DPH sent a DIS to the client's home to investigate why the appointment was not kept and why the client refused to reschedule. It was discovered that the barrier revolved around child care and an insufficiently flexible clinic appointment system. DPH then mediated between the client and the clinic. A compromise was reached and the client was back in care within 3 days. This is typical of our system and Delaware is proud to say that we have had only 1 HIV-positive live birth in the last 3 years—and this occurrence was due to the client's refusal of repeatedly offered treatment.

If a woman is rapid tested during labor and found to be positive, all Delaware hospitals administer HAART therapy during labor. Subsequently, all infants born to HIV-positive mothers are referred to A.I. DuPont Children's Hospital. Further, if a mother had chosen not to be tested and her infant was subsequently found to be HIV positive, she would also be referred to A.I. DuPont Children's Hospital.

## Results

In summary, HIV-positive women are identified through routine HIV testing as part of prenatal care, and during labor and delivery for women with no documented HIV test. The provider of the HIV/AIDS treatment clinic and the HRPC is the same provider, thereby capturing any clients who are in the treatment clinic who become pregnant. OB/GYNS refer all HIV-positive women to the HRPC. Therefore, HIV/AIDS treatment and HRPC treatment transitions appear to be seamless to the pregnant woman.

Women who are discovered to be HIV positive at delivery are given HAART treatment during delivery and the mother is referred to HIV/AIDS treatment clinic and the infant is referred to A.I. DuPont for follow-up. Mothers are routinely referred to a case manager if they were not previously case managed. The baby is also referred to case management; the mother's case manager handles the infant's case. This comprehensive system provides a tight net of support for HIV-positive pregnant women.

Delaware has several quality assurance (QA) practices which document the efficacy of our system. These QA measures identify gaps in implementation and women who were not tested and delivered.

- 1. Chart Review/Provider Education
- 2. Survey of Childbearing Women
- 3. HIV/AIDS Clinic/High-Risk Pregnancy Clinic Census

DPH staff conduct chart reviews at all 7 hospitals in Delaware every 3 years. They select charts based on the CDC method called lot quality assurance, which uses a small number of charts to determine documentation rates. This chart review indicates if women are routinely offered HIV testing. Documentation of HIV testing for pregnant women is currently at 86% statewide. This is up from 66% in 2001.

After 2001, Delaware instituted a comprehensive education program to educate all OB/GYN providers of the need for routine HIV testing for HIV-positive women and prenatal treatment of HIV-positive pregnant women. In collaboration with the Delaware Local Performance Site (LPS) of the Pennsylvania Mid-Atlantic AIDS Education Center, this education is still being provided as updates or training of new providers.

Chart reviews are also used to identify focus areas for our provider education program. There are 7 hospitals in Delaware, 3 in New Castle County, 2 in Kent and 2 in Sussex. The chart reviews are broken down by site and county. The sites and providers can be easily targeted for increased education based on the rates of documentation.

The Survey of Childbearing Women provides us with the number of HIV-positive women who delivered. This is accomplished by universally and anonymously conducting heel sticks on all newborn babies. From a high of 0.17%, in 1999, Delaware's rate of HIV-positive women who deliver is 0.14% or 18 women as of 2003. Fourteen of these women were treated in clinic care. The other 4 are in private care.

## **Conclusions**

By comparing the number of women shown to be HIV positive through routine testing, rapid testing at delivery, the Survey of Childbearing Women, and the women in clinic care, we are able to account for every HIV-positive pregnant woman and determine how many if any failed to receive prenatal care. Therefore, every HIV-positive woman not explicitly refusing the service receives prophylaxis before or during delivery. As a result, no incidence of seroconversion among infants has occurred since 2002.

By working in collaboration with contracted CBOs and private providers, Delaware has been able to identify and provide treatment to all HIV-positive pregnant women and their children.